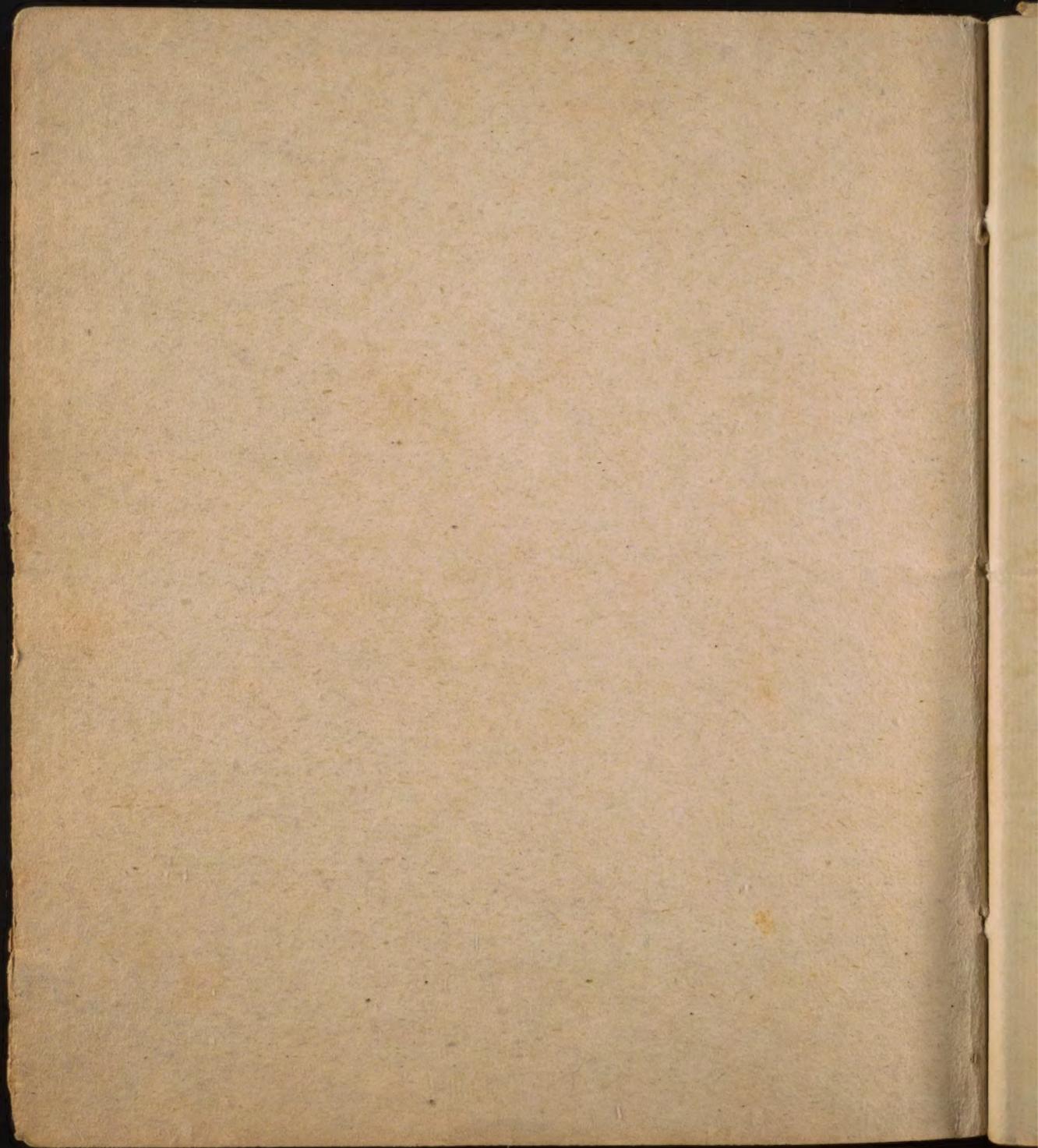


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F 18

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Veneral Appetite cont'd. 761
Generation & Conception 762
Parturition — 788.

✓ There is another striking peculiarity in
the sexual appetite in which the goodness
& wisdom of heaven is displayed in an emi-
nent degree. I before remarked that it is
felt by man at every season of the year,
- and that the gratification of it is always follow-
ed by debility. ~~To prevent the fatal error~~
now had

~~if~~ man like the brutes been
permitted to ~~enjoy~~ ^{of an unlimited} ~~any~~ ~~any~~
commerce ⁱⁿ the female sex, he would soon
have destroyed himself ~~in~~ in the course of
a few years, for brutes suffer by their ~~exces-~~
~~ses~~ promiscuous ^{affection} connection wth their females, ~~in~~ the time
for that purpose be limited only to a few
weeks. Man is therefore wisely confined
to the possession & enjoyment of only one
woman - by which means he is ⁱⁿ no

~~an animal fonds of children?~~

✓ ~~Human~~ This provision for continuing ^{by means of the venereal} ^{appetite} animal life is not confined to the human species. It extends to every class and species of animals, and ⁱⁿ most of them the venereal appetite acts ^{the} much more force than in man.

The ~~elephant~~ horse - the bull - the Ram - and the boar all exhibit in the paroxysm of venereal marks of activity bordering upon madness. -

The amphibious animals seem to enjoy this pleasure in a higher degree than any other animals. The turtle remains in a close connection with its female for 3 or 4 days - and the

Danger of committing an excess in his indulgence of sensual pleasures for in this case - appetite - and excitement are always combined together - whereas in a general ^{empire} ~~accident~~ with the sex, App-
petite would be roused by every fresh object, without such a corresponding excitement as would enable the system to bear ^{the} effects ^{of its} gratification. -

In the history of generation by Dr Harvey F
was much struck in observing that all the
vices and all the virtues discovered ^{in the} sexual intercourse of the
male and female of the human species ~~in the~~
~~are discovered by~~ ^{1 of these vices.} Different dumb
animals. The stallion and the cock delight in
polygamy, or a plurality of mates - the she
wolfe admits an indefinite number of males
to her embraces. It was upon this account
a brothel was called in ancient Rome Lyca-
maria. The cock commits ^{sometimes} rape, and when
comes his sexual appetite to such ^{except to} ~~degrees~~ as
to tear the feathers & even ^{to} the ~~the~~ wound the back of
the female by repeatedly trampling her - several
animals of the same sex attempt ^{attempt} ~~un~~sexual con-
-nitions with each other so particularly cows -
2 The virtues of the sexual intercourse of the human
species are discovered in the partridge. Each male
confines himself to one female. The same
takes place with the Bosph & the Doe. They ~~also~~
assemble the human species by ^{stomach} ~~as~~ a
place of retirement for the gratification of their

toad - not less than 8 or 9 days. To
 much does this pleasure ~~surpass~~ ^{justify} all other
 sensation. ~~exist~~ in the toad, that Spalanzani
 tells us it continues its con-
 nection with its female under the
 greatest tortures ~~that~~ can be inflicted
 upon its body, ~~even~~ the amputation
 of its limbs, - and finally, ^{its some cases it} parts with its
 female, only with its life. ~~The female~~
~~utterly admits the impossibility of the male's ever laying~~
~~eggs after its head is cut off. What~~
~~These facts put us in a position as~~
~~important in morals as in science.~~
~~- What~~ How ignoble must that life be
 which is devoted wholly to the pursuit of
 a pleasure which beasts and even
 toads enjoy in a higher degree of ^{than the}
~~human species? man~~
~~must be destined to much~~

Danger of committing an excess in his
indulgence of sensual pleasures - for in
this case - appetite - and excitement are
always combined together - whereas in
sensual appetite. Important inferences might
be made from these facts in favor of the
moral responsibility of and a state of future
existence of certain Devilish Animals as held
by Dr Tilders & Dr Forresty, and as hinted
at by Dr Huxley.

thus shewse to many & numerous ~~easy~~

toad - not less than 8 or 9 days. So
much does this pleasure ~~not~~ ^{not} destroy
sensation, that in the toad, that Spalanz-
zani tells us it continues its con-
nection with its female under the
greatest tortures that can be inflicted
upon its body, ~~even~~ ^{even} the amputation
of its limbs, - and finally, ^{in some cases it} parts with its
female only with its life. ^{The female}
~~utterly admits the impossibility of the male's ever laying~~
~~Ch 1530. Ability to lay is lost. Why 15202~~
~~These facts point: truly us a lesson as~~
important in morals as in science.

~~- 1000 How ignoble must that life be
which is devoted wholly to the pursuit of
a pleasure which beasts and even
toads enjoy in a higher degree of ^{than the}
human species? man
- It must be destined to much~~

P Happily for us man can do
harm in our inquiries upon
this subject, for if perfectly
known, there is not a single
useful purpose to which it could

it applied in medicine. ~~Especially~~ On

the contrary, perhaps it is wounded
from us in order to ~~never~~ ^{never} it

the knowledge of it being applied to
mischievous & immoral purposes.
sum up. — — — — — more points

v - hence the silence the solitude, and
the secrecy with which it is conducted in
the human species. P see above.

I mentioned previously from J. Hunter an instance of the Urt. ^{lemon} leuca being translated from the glands penis to the root of the penis. Mr. Soegece relates an instance of its

more sublime enjoyments than those which arise from the gratification of the sensual appetite, - Otherwise he would not have been placed in the scale of pleasure - below the Animals which have been mentioned. + -

+ I conceived these Observations upon the sensual appetite to belong to the Physiological history of man. we shall find this application in the Pathology.

I enter upon an inquiry into the cause of Generation or of the production of a human Being with great diffidence. I

do not know

Clouds & darkness have long hung over this mysterious operation of nature.

~~soon~~ ^{soon} after the application of the microscope to anatomical

The facts I shall mention
connected with ^{inception of} pregnancy & antenatal
-tion will be important, and I hope
apologise for my inability to
satisfy you with a satisfactory
theory of conception.

which it was
calculated to favour ~~early marriage~~, and
to prevent & punish uncleanness & promiscuous
intercourse of the sexes. — The same law (if revived)
would have the happiest effects upon the order & hap-
~~happiness~~
piness of Society. Something like it, I believe exists
in Prussia. — Man was made to be ~~happy~~ derive hap-
piness both from his body & mind, and in
a future state of existence from which
probably all inferior animals will be
excluded. There is one more peculiarity
& hence the silence the solitude, and
the secrecy with which it is conducted in
the human species. P see above.

I mentioned previously from J. Mentelle
an instance of the ent. lent^{ation} being translated
from the glands penis to the root of the penis.
Mr. Sagerie relates us the instance of its

more sublime enjoyments than those which arise from the gratification of the venereal appetite; - Otherwise he would not have been placed in the scale of pleasure - below the animals which have been mentioned. +

† I conceived these observations upon the venereal appetite to belong to the Physiological history of man. we shall find their application in the Pathology.

I enter upon an inquiry into the cause of Generation or of the production of a human Being with great diffidence. +
Clouds & darkness have long hung over this mysterious operation of nature.

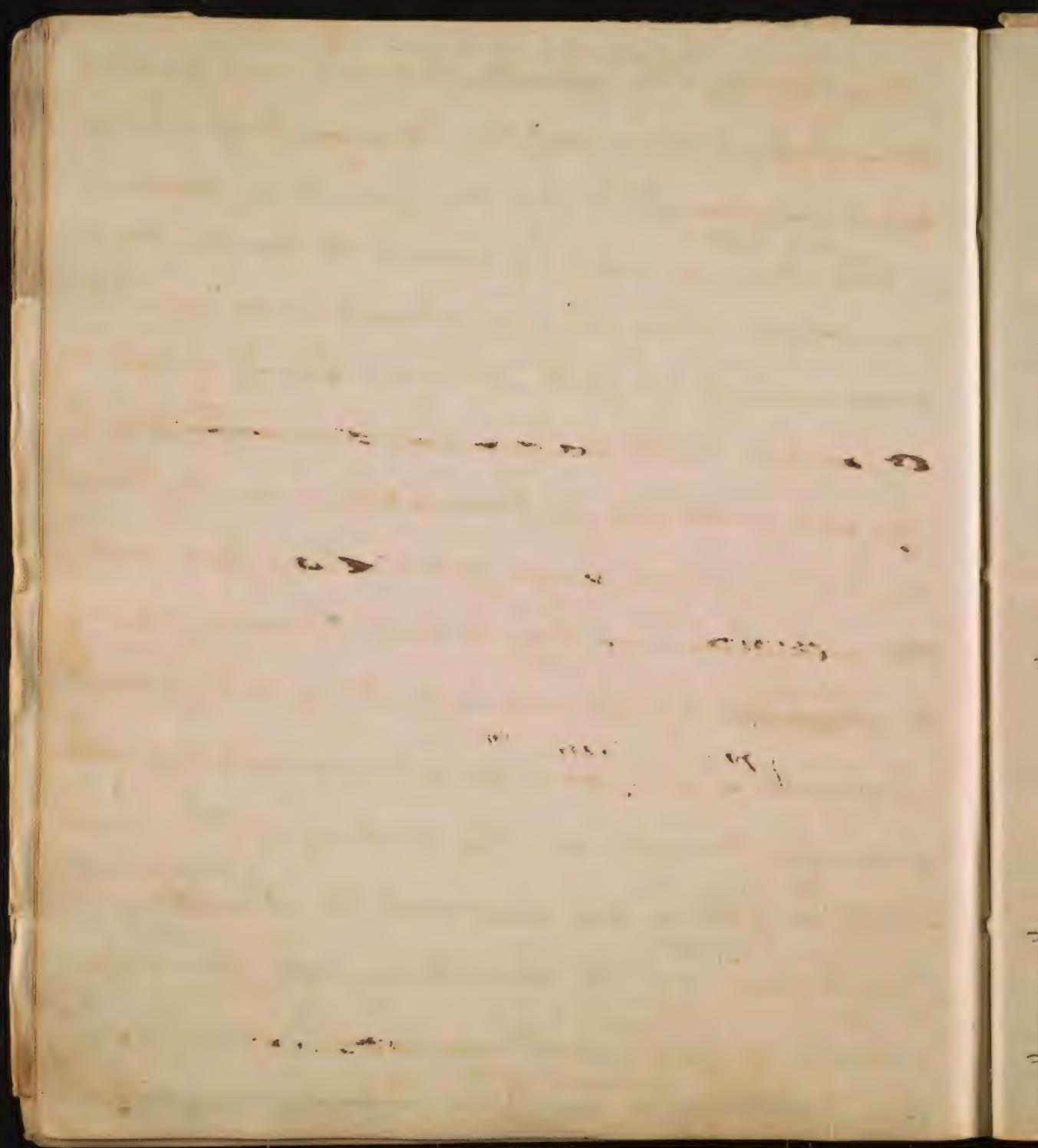
~~Soon~~ ^{Soon} after the application of the microscope to anatomical

being translated to the palms of the hands in
a young man at Lyons. — He felt a burning
irritation at the sight of a Woman, and by rubbing his
hands together, he felt excited with a voluptuous desire. ^{in today} ~~over~~ ^{Scope}

V The existence of Animalculæ in the
seed is still admitted. They the Semen is
their element, and they soon perish in
any other fluid. They have no mode of
reproducing themselves that we know
of, and they have no influence on
the Semen in imparting to it its
founding stimulus. For this discovery
we are indebted to Spalanzani, who
has added a theory to it

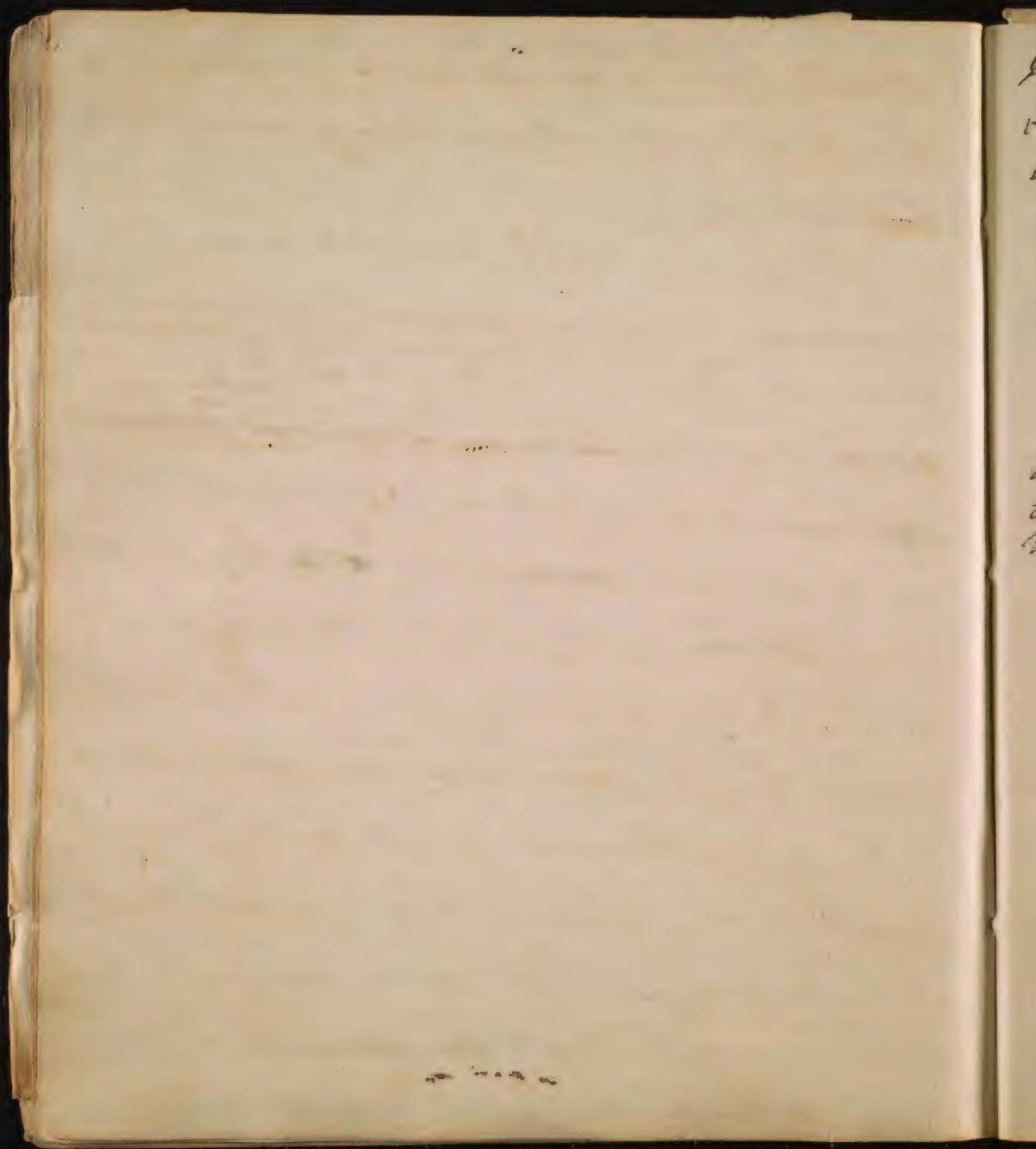
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purposes, the Male semen was found to be full of animalcula - each of which was supposed to be an embryo fetus, - The Uterus was supposed to be the matrix in which this animalcule was reared & nourished until it was brought forth a perfect Child. This doctrine ~~was~~ ^{continued} to be taught with some variations in the schools of Physic for many years. The female ~~was~~ was believed by some Physiologists to ~~concur~~ ⁱⁿ by a mixture of a supposed female seed, - or by administering ~~the~~ female ovum as the seed of the male seed. - It was resolved to the ~~Cs~~ ^{immortal} Spalanzani to overturn all these hypotheses of Generation, and to establish by analogy ^{more simple} ~~more complex~~ ^{discovery} ~~considering that~~



which has ^{dissipated} 703 a considerable portion of the darkness which hung over this subject. -

It appears highly probable from the manner in which generation is carried upon which Spallanzani made use of his experiments on in Amphibious animals & in a little ~~does~~ that the ^{female} ovum ^{contains the} ~~hormone~~ ^{of} ~~which~~ ^{is} ~~the~~ embryo of a future fetus, and that the male seed ~~acts~~ acts ~~to~~ by imparting ~~that~~ ^{from Mr Hunter} motion to this ovum in ^{the} animal life consists. The male seed I said formerly ^{was} of a pungent nature. - It seems therefore to act by its stimulating power. - From this we see that stimulus begins, as well as supports human life, and that ~~the~~ ^{is} the first motion of life in man is excited by it.



In a word -

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He is awakened from his long sleep in
his original embryo state, by means of ~~force~~
~~which~~ ^{that} supports every subsequent part
^{animal} of his existence. —

A question now occurs, & that is how
is the male Semen sent in contact with
the female Ovum? ~~to be done next~~
~~to this~~ Question is that the Ovum is carried
in the Act of Copulation by the fibres of the
fertilian tube and conveyed from the
ovarium thro' the tube into the Uterus,
where it meets with the male seed, & is
impregnated by it, - But there are ~~4~~ solid
objections to this solution of the question.
1 a fetus has sometimes been found
in the Ovaria ~~to be done next~~ as also in the

✓ I know a Student of Physic in Edin^r
who was called upon to marry a ~~girl~~^{girl to}
whom he was engaged, in consequence of
her having become suddenly pregnant, who
told me that he had never had such a
connection with her as had less injured the
badge of Virginity - and Dr Lawder has de-
scribed that he had once delivered a woman
in whom he found upon attempting to
introduce his fingers into the Vagina - the
Hymen still inviolate. - Dr Johnson in
his Midwifery relates several cases of the
same kind. - But Dr Harvey goes further.
He mentions an instance of a mare that
~~had been delivered~~^{had been delivered} to ~~that~~
had been ringed to prevent her breeding,
that notwithstanding her pregnancy the
extrem^e of the Vagina were bursted by the passage
of the Calf into the World. -

fallopian tubes - 2^o The Uterus has appeared closed after coition so perfectly as to exclude the admission of the seed.

3 Impregnation has taken place wh in cases where the semen has been emitted by a penis which has been reduced by amputation or mortification to $\frac{1}{4}$ of its ordinary length - very more, it has taken place where it has been emitted only in the entrance of the Vagina - to the

great ^{grief and shame} of young people who have thought by these means to prevent the discovery of their folly by the subsequent pregnancy. ~~to account for~~

4^o of the ovum ~~expulsion~~ and its passage into the Uterus afterwards is generally ascribed to the



energy of the sexual organ in women,
 often ~~pubescent~~ sometimes
 but this energy I believe is often absent
 in ~~some~~ ~~it~~ ~~more~~ ~~and~~ ~~less~~ ~~affectionate~~
~~for~~ women - who notwithstanding be-
~~come~~ ~~or~~ ~~attempting~~ ~~to~~ ~~become~~ ~~children~~
 - come pregnant from a venereal connection.

- To account for the Union of the male
 seed with the female ovum under all
 these unfavourable circumstances, I
 shall first relate one of Spalanzani's
 experiments. - He found that three grains
~~of seed~~ ^{of water} ~~mixed with~~ ~~the~~ ~~fact~~ ~~of~~ ~~in~~ ~~in-~~
 - ~~parted~~ ~~such~~ ~~a~~ ~~fecundating~~ ~~quality~~ ~~to~~ ~~a~~
~~coarse~~ ~~it~~ ~~was~~ ~~root~~ ~~of~~ ~~the~~
pint of water, that a single drop of it
 afterwards impregnated the ova of a
 female toad. now, - may not the male
 seed ~~enter~~ whether deposited in the uterus
 - in the vagina - or only at the mouth

✓ by lymphatics
~~by lymphatics~~ which possess a
specific power of absorbing ^{into action} leminosity
and which are excited ¹ by the sensation
of pleasure connected with Cortion. ²
~~He adds it to the theory But he adds it to~~
~~He thinks that should it~~
Mr Dr. Winter has proposed another
theory - turn over to V.

of the vagina be absorbed ~~and the V~~
 & conveyed directly to the ovary, or
~~conveyed to the blood~~
~~to never be~~
~~conveyed by the circulation~~
 to the ovaria, to act upon the female
^{= reborn} ~~ovum~~? — This was the opinion of
 Dr Harvey, and tho' it has been rejected
 by this ^{equally} most Physiologist, I can
 see no other to be ~~more~~ rational, or
 plausible. — The whole mass of blood
 does not bear a greater proportion to the
 quantity of seed ordinary emitted in
 a venereal connection, than the of water
 did to three grains of the seed of the
^{in the successful experiment} ~~seed~~, mentioned by Galanrrani. I
 conceive further — that the ^{ova in the} ~~seed~~ ~~seed~~ in the
 female subject are stimulated specifically

~~Very little thing could be satisfactory,~~
~~but this is not to be expected~~
It has appeared that all the ~~passages~~ from the body have a motion in them, analogous to the peristaltic motion of the bowels, by which they gradually under certain circumstances, ^{gradually under certain circumstances} propel their contents out of the body. - This is evident in a gonorrhœa - ~~in the~~ ~~and~~ ~~stomach~~ - and in some diseases of the lungs - in which there is a constant discharge of mucus from the trachea.

The menses are probably discharged from the Uterus & Vagina by a peristaltic motion in each of them - But as in the bowels, so in some of the ~~passages~~ ^{of} the body there is an inversion of this peristaltic motion. - we observe it in the Oesophagus.

✓ try the male seed, and that it exerts no action upon any other part of the system. - hence no inconvenience is felt from it in unfruitful connections - and in those connections the Absorption must necessarily be the same as in those which prove fruitful.

More happens here than what happens in many poisons which after circulating in the blood act specifically upon certain parts of the body. But why mention the analogy of poisons? A single grain of \& after circulating for several days in the system has excited a salivation by its specific stimulus on the salivary glands.

A general circumstance affect

in the case of Cardiogynia putatoria.
In like manner - may not the Vagina
- the uterus - & the fallopian tubes be
actuated by this inverted peristaltic
motion, and thus propelle the Seed
into the ovaria? - This ^{theory} will
account for the pregnancy taking
place under the unfavourable circumstances
before mentioned, but as the inverted
peristaltic motion of the ~~begin~~ passage
into the ovaria - has ^{been inferred, only} from analogy, the ~~above~~ ^{opinion} built
upon ~~is~~ ^{it is in my opinion} more hypothetical than
that first taught by Dr Harvey ^{turn over to p780} and developed

+ ^{former} This was here proved in many cases,
but lately in a remarkable manner at
Port Jackson in Botany Bay where a Dr
Harris informed Dr Wyril formerly of
this University that several barren
women had become pregnant im-
mediately after their arrival in that
country and bore several children.

One of them was an old
prostitute of near 70 years of age.
^{This is in consequence of a change of climate referred to the}
Rev Mr M'Farley in his history
of St Kilda says that sheep when sent
to that Island from the neighbouring

Islands always breed ^{the} year after
wards. ^{again a student of med. in 1816 informed me that} 3 Women from South Carolina visited
a ^{7-10. 9-13 years. All conceived afterwards.} Sensation of pleasure is necessary to
render a sexual connection fruitful, and
it is because this sensation is in a great

the fixability of the ~~ova~~ to be made
 leads - the ipse of a general connection
 with respect to its becoming fruitful -
 such as the ~~power~~ ^{the power} inversion of the peristaltic motion
 of the ^{of the} Vagina - Uterus - & Fallopian tubes if it occurs, - or
~~absorbing~~ powers of the Lymphatic vessels
 of the Vagina - and the ~~general~~ ^{absorbing} healthy
 state of the ovaria, - The two last are
 greatly influenced by a peculiar state
 of excitability in the ^{female} system - hence we
 find corruption to be most certain,
 immediately before - or ~~After~~ menstruation
 - after a fit of sickness & after long ab-
 sence - ~~and~~ after the action of fresh stimuli
 upon the system by a woman's
 visiting a foreign country & ~~foreign~~ ^{and after using the warm bath}
 No woman does the male bid all

in ~~the~~ the case of Cardialgia Sputatoria.
In like manner - man not the less -
or perhaps totally
degree destroyed, that prostitutes so rarely have
children. This too absence of pleasure
has been acknowledged by them. ^{It} —
follows one of the terms of lassation formerly
mentioned. —

- That

1. 27

The Semen comes for contact with the

the fixability of the one to the male
 leads - the issue of a venereal connection
 with respect to its bearing fruitful -
 such as the ~~power~~ ^{the power} inversion of the peristaltic motion
 of the Vagina - Uterus - & Fallopian tubes if it occurs, - or
 obstructing powers of the Lymphatic vessels
 of the Vagina, - and the ~~condition~~ ^{condition} healthy
 state of the ovaria, - The two last are
 greatly influenced by a peculiar state
 of excitability in the ^{female} system - hence we
 find corruption to be most certain,
 immediately before - or after menstruation
 - after a fit of sickness ^{particularly a malignant fever} & after long ab-
 sence - ~~or~~ after the action of fresh stimuli
~~upon~~ upon the system by a woman's
 visiting a foreign country & ~~for~~ ^{at the beginning} ~~after~~
 no woman does the male bed ~~but~~ ^{at the beginning}

Dr. Venkateswara Iyer - tried whether a volatile principle would not have that effect emitted from it, but to purpose.

† a third theory has been proposed to account for convection by Dr Haughton and that is that it is the effect of sympathy

of a specific nature. He supposes that the male seed whether ~~relic in uterus~~ ~~or in~~ ~~uterus~~ ~~or in~~ ~~vagina~~ acts ~~on~~ ~~the~~ ~~female~~ ~~ovum~~ in the same manner that certain substances taken into the ~~body~~ stomach affect parts of the body remote from it without ~~the~~ contact, & that the stomach is affected by certain substances applied to the skin which are not absorbed, and that do not enter into the circulation. This opinion is ~~refuted~~ ^{refuted by an} experiment of Spafenianji. He proved that no impregnation took place unless the semen came in contact with the ovum. Even the vapor of

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upon the female organ that it is torn
from the ovarium, and conveyed gradu-
ally by a convulsive contraction
-ally this the fallopian tube into the
uterus. — The menses - the disposition
to faint - the obstruction of the menses -
the tense pulse - the dry blood - the dry skin - high cold urine
- the pains in the teeth are all the effects
which follow - the yellow & black spots - (exquisitely sensible
of a new and peculiar fibrillæ in the
part of the system. ~~the~~ ^{gen} hundred analogies

of similar, & even greater convulsions
in the system might be mentioned from
the action of certain local chemical &
mechanical stimuli. Besides the common
symptoms of ~~pregnancy~~ ^{conception} which have been
mentioned, I shall mention ~~two~~ ^{several others},
one of which occurred under my
own observation: a lady in this city
during what is called her breeding period,

~~the former did not
when applied to
the whole I am~~ ~~it is hard to believe it comes
from the most probable of any that
by hypothesis either directly or indirectly, and the
same may have stood return to 1768 A
Plan being acted upon specifically by it. The others~~
D 5. Dr. Whyt relates a case in which preg-
-nancy discovered itself by a disrelish to
sweets. Her relish for it returned as soon
as it was delivered.

as she was delivered. ^{modestly}
6 McDermott mentions an instance of a
fatuity occurring as the first sign of
conception of pregnancy. ^{it will be interesting}

Conception & pregnancy.
Dr D'Ugues informed me that he knew
a lady in whom a wish for a particular
kind of aliment which she cannot eat
at any other time overrode the certainty
of Conception. ^B

~~of Conception~~ ^B ~~of the~~ whole course of this pregnancy ~~without a symptom of будильник~~ of any kind. This is a rare occurrence. — after all midwives & Dr. Denit. T. H. Harvey
examined small - it returned after delivery

15. The final cause of this the nausea & want of appetite which attend the first months of pregnancy, Dr Hunter used to say was to guard the system against ^{inflammatory diseases} ~~all the~~ to which it is always predisposed from the stimulus of the fetus more especially in its forming state. may be relieved —

I have known two instances in this city of conception be without the least sickness during the whole course of pregnancy.

cy. most of the symptoms of conception which have been mentioned cease after the 3rd month, but ~~most~~ of them are often followed after a time by many other of a distressing ^{time over} nature.

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the former did not induce impregnation when applied to
the ovum. It is reported further by an experim.
now the subject of Dr Hartman's opinion
of Dr Hess, of many land who prevented conception
I shall now proceed to state what is known
in a sow by cutting off the Fallopian tubes. This
is known as well as in dogs, and that it is
now had previously had ~~physically~~ ^{physically} several litter of
two ~~conceive~~ ^{conceive} to ~~possible~~ ^{possible} in principle
~~in~~ ⁱⁿ ~~embryos~~ ^{embryos} pigs. — Upon the subject of Dr Hartman's
beyond the natural limits of life of them. Thus
Animals ~~and~~ ^{and} - ~~Electric~~ ^{Electric} - oxygen - galvanism
dicti for a while covered all the phenomena of
life and disease. ~~Opinion~~ ^{Opinion} I shall only speak
life and disease - ~~discrepancy~~ ^{discrepancy} it is very common
to ascribe to one cause that which should be
ascribed to more than one or two, also but one
effect from a cause while produces a greater
number of effects. This mode of reasoning has done
great harm in medicine. I did not mention
of t. Sympathetic has taken the place of electric
oxygen - galvanism in explaining the phenomena
of the human body. From the manner in w.
certain medicines operate we know it has been
extended improperly to all medicines. In like manner
from the influence of sympathetic in dogs causing some
of the functions of the body, it is extended to them
all, and most erroneously perhaps to prevent for dogs
but ~~now~~ ^{now} ~~they~~ ^{they} are often followed after a
time by many other of a distressing nature -
such as ~~menstruation~~ ^{menstruation} - of ~~domestic~~ ^{domestic} ~~fatality~~ ^{fatality} signs of pregnancy.

upon the ~~take~~ of a review of all the
theories I have delivered, I am ~~now~~ have
no hesitation in admitting that con-

~~ception depends upon the nerves
being conveyed thro' the fallopian tubes
either directly or by
indirectly by ^{absorption} means of the ~~apparatus~~ to the uterus,~~

~~to the ^{nerve} in the female organ
in the ovaria, which according to D' Harvey
the whole uterus seems
to possess the same sensibility to its stimuli
which the brain possesses to those
stimuli which produce sensation and
thought. — return to p. 768 A~~

V4 Dr Dussey mentions an instance
of women who never sweated but on
one side of her body. No sooner did
she become pregnant, than sweat app.
on both her
a case in w:
sweats on one
sign of pregnancy.

inspirable

Obs. - He relates further
that the absence of
sweat was ~~the~~ ^{the} first a

Sickness, tension, ^{urtigo-}
such as, ~~burns~~ ^{urtigo-} in the abdomen & joints in
the back & head ^{a full a large pulse - thirst - heat} of the skin ^{Costiveness. Impression,} or
involuntary flow of urine - Jaundie ^{to the liver} & now
& then swelled legs. From a careful view of
all these symptoms, I have been led to
consider the female body as in a diseased
state from the beginning of conception to
to the period of delivery. The disease partakes
of many of the symptoms of fever, & is re-
lieved by the remedies used for fevers from
other causes. But its effects moreover upon
the uterus are the same, as the effects of disease
are
when it appears in the form of inflamⁿ: ~~as~~
upon other parts of the body. It enlarges it
according to Dr^o Hunter to 50 times its natu-
ral dimensions. Inflamⁿ: ^{markedly} has the same
effects upon other viscera - particularly the ^{liver}
limbs. & the ^{This swelling of the limbs} liver. ^{is cured by the same}
remedy after Child birth, that cures other

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to be performed in the Ovarium. ~~The~~ ^{It}
The impregnated Ova seem to be con-
veyed into the Uterus only to be nourish-
ed. The Ovarium, ^{therefore} may be compared to
a hot bed, in which the first life is im-
parted to the bed of a plant, ^{while} the Uterus
may be considered as a large green
house in which the same bed is after-
wards transplanted, and sheltered from
the weather until it has ^{grown to} ~~ripened~~
such a size as to bear the action of
~~dry~~ ^{dry} air upon it. —

I have hitherto called the maledict
a Stimulus only. But it is a stimulus
of a peculiar kind. If a scented liquor
it is true, but it seems to be formed not
only from ~~distilling~~ the fluids sent from

Swellings from inflammation. Viz: Bloodletting.
The leeches ~~contain~~^{contain} the blood which is gradually
discharged for this purpose. - return to 781 E

V. The same reasons account for the
delay of the ~~formation~~^{evolution} of the ovaria,
& the production of the ova in females
at till the age of puberty.

F But another solution is given of the
cause why children resemble their parents, &
that is their having them constantly before their
eyes. It is certain the inhabitants of
towns villages, & whole countries have a
general resemblance to each other from the
above cause. But the resemblance of childⁿ
to their parents is often perceived at birth,
before they ~~are~~ their eyes or foreheads are
so far opened as to know them. Bastards
are said to bear the greatest resemblance to

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the solids, & not - only from the body but
the mind of ~~man~~^{man}, - and this I take to be
the reason why it is not formed until
the body has acquired its full growth, &
this is the reason likewise why I formerly supposed the change ⁱⁿ of the
~~body~~ to at puberty to influence the genera-
tion of the seed. ~~at~~ ~~than~~ ~~the~~ ~~body~~

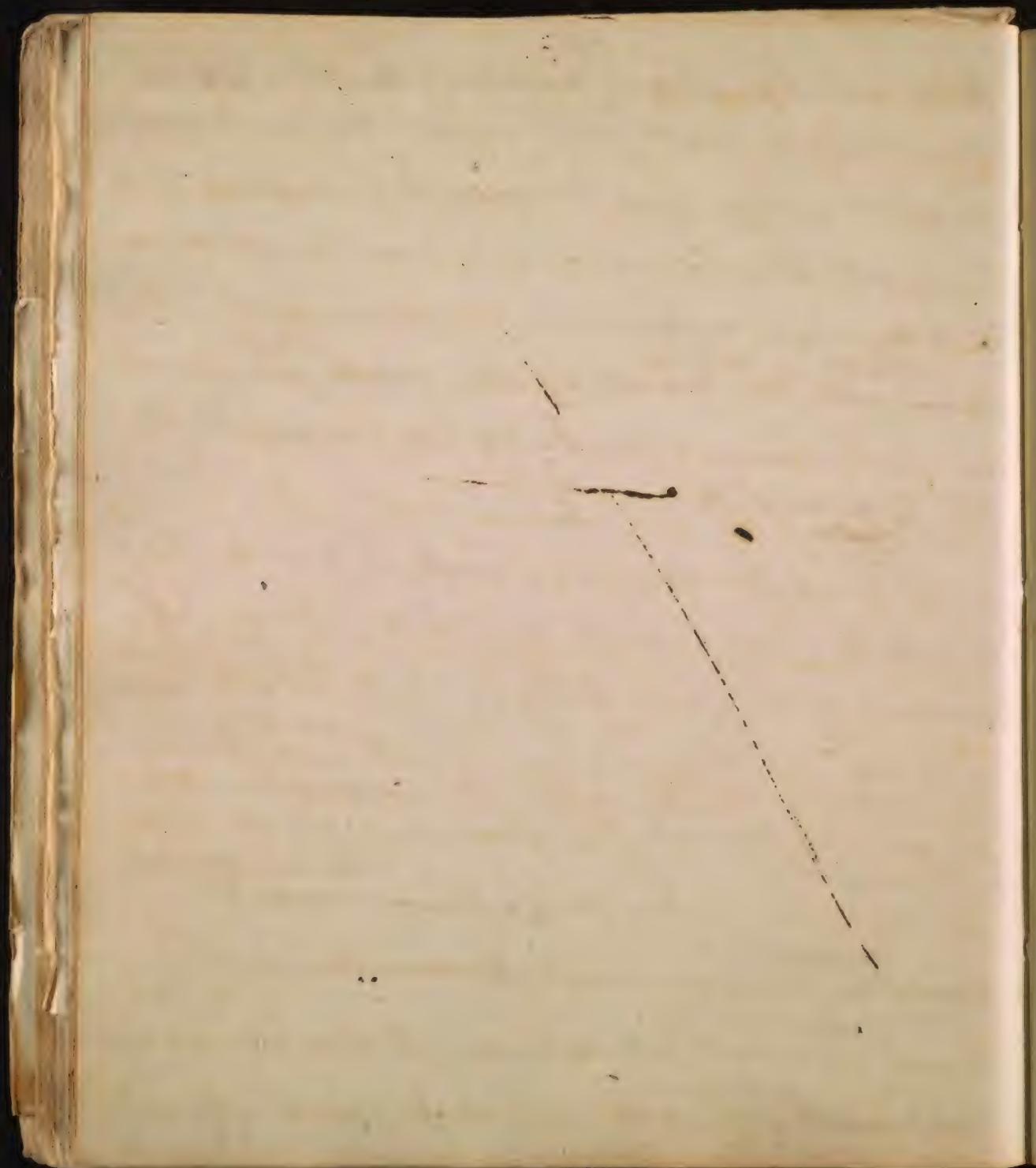
[as every part of the body as it were
claims its proportion of matter to form the
lumen, it is no wonder that we find
children resemble the male as well as
the female parent. no more happens
here, than what happens in many cases
of impression upon the body from other
stimuli. - the stroke with the open
hand on the tender flesh of a child produ-
ces ⁴ as obvious marks of every finger:

their parents, especially their father. J

1784.

But we have an analogy in the ~~material~~ ^{immaterial} inanimate world ^{that is} still more to our purpose. Light acting upon vegetables imparts to them, all the colors which are involved in its body, in a manner no more mysterious than ^{that in which} all the parts of the ^{which} snake ^{are involved} in the machine ^{are} ~~are~~ imparts to the female Ovum -

~~This gentleman - hence I passed this a defile - beset with diff obstructions and dangers of various kinds. - There are ^{three} ~~two~~ subjects in Physiology, which are the action of the will in Morals - the origin of power in Government & the doctrine of the Trinity in religion. They are like ^{are like} the action of the will in Morals - the origin of power in Government & the doctrine of the Trinity in religion. They are like ^{three subjects} the wind and generation. They have ^{been} viewed at a awful distance, or only approached with timid & reverential~~



Steps. - But the time for venerating ancient prejudices is past. Government like animal life has been shown to be the effect of the wills of a whole community, and the ~~country~~ ^{animal life} has been ~~made~~ ^{reduced to} the standard. These subjects are the human mind, & generation. I have ventured to ~~part of generation~~ ^{and} tear the "mystery from each of them," and to reduce them to a code with the common and known laws of matter. ^{into the nature of each of them,} If I have not succeeded in my inquiries, - I hope I shall have ^{laid a foundation} ~~for you~~ ^{each of} investigating them here after, with the same boldness that you would the common laws of matter.

I am so perfectly satisfied that the business of generation depends upon

V ~~Dr~~ ^{Dr} ~~Chamis~~ Chamis (a French physician) has broken the ground upon this subject. ~~He~~ It has long been observed that Bastards possess an uncommon portion of mind. The Dr ascribes this to the mind of the father being more highly excited by the contrivance & execution of his stratagems for the seduction of innocence, & by the mind of the woman when pregnant, being equally excited by contriving schemes to evade the disgrace & expenses induced by her prostitution. We shall have no difficulty in admitting this solution of the question, if we admit the mind ~~to be~~ material, or the result of organization, ~~to~~ to club its proportion towards the formation of a child. It has ~~It has uniformly been remarked that~~ ^{been of less degree} uniformly been remarked that mothers contribute more towards the

principles obviously mechanical, &c:
 I have no doubt but the time will come
 when it will be ^{as} possible to tell ~~from the~~
~~things of the body & soul, what~~
~~in children~~
 portions of beauty & understanding will
 be the consequence of the union of persons
 of certain qualities of body & mind in
~~matrimony~~, as it is now is, to tell what
 will be the result of the mixture of
 certain simple substances in Chemistry.

- Our ignorance upon this subject arises
 wholly from a want of ^{of the} ~~of the~~ observation. ✓

Aquarably to our syllabus of the
 next have proceeded to treat of the gradual
 formation ^{of the} ~~of the~~ nourishment ^{of the body} ~~of the body~~
 - cation of the blood in the ^{of the} ~~of the~~
 fetus from the womb, but you will
 hear each of these subjects discussed

formation of Genius or mind than fathers. I have
observed it in 9 out of 10 families of children, &
V [I] would only observe upon the
subject of the nutrition of the fetus,
that Dr. D'Amien has lately revived,
the old doctrine of its being carried on
by means of the liquor amni. He
supposes further that the ^{blood is} fetus is
conveyed to the ~~the~~ fetus by the
Umbilical cord, not to nourish it,
but simply to supply its blood
with oxygen. —

True it is - "Sensus sequitur, sequiturum
fatum". There is scarcely a history of a
~~man~~ much distinguished for talents
or virtue, that had not a ~~wise~~ sensible
or pious mother.

Upon the Subjects of General Phys.

in the most ample manner from the anatomical chair. V

The ordinary period of pregnancy is nine months - but to this there are some exceptions. - Books of medicine mention 13 ~~months~~ & 5 months as the two extremes of natural ^{pregnancy} ~~gestation~~. Dr Harvey records several cases of Un-equivoocal births at the end of six months in which the children have survived their native weakness. It is of consequence to know these facts, as we may in some instances presume the state of families & even the order of ^{Dr Harvey} ~~order~~ ^{child} birth. ~~he~~ mentions a case of a ^{child} born in the 5th month, that lived to be 12 years old. - The history of extrauterine conceptions, also of superfecundation belongs

✓ Before I conclude this subject I have to remark
F. The presence of the humor is supposed
to indicate the want of innocence ~~in~~
~~opposition~~, & its absence, a mark of
virtue in a young woman. But the latter
is not universally true. It is sometimes
absent naturally, & frequently ^{by falls - by rapid walking} destroyed
by the disease, particularly by the Lævov.
which is ^{often} attended with a humor
so corrosive as to inflame & erode it. It is
renovated in some instances, provided coitus does not
take place soon afterwards" ^{applicable to Gravidae}
~~no female but the humor has a humor.~~

F- 4 ~~the best of the women suggests him, I~~
I shall only add, that the uncertainty, w.
still hangs over this, ~~has~~ ^{doest} ~~no~~ ~~any~~
but very little influence upon the ~~or~~
~~effect~~ the practice of medicine ~~or~~ the progress
of our science towards perfection. Should
those mysteries ⁱⁿ nature never be revealed,
we may still ~~go~~ on increasing our
knowledge of the laws & diseases of man.

to pathology. —

At the close of natural pregnancy, the fetus makes efforts to escape from its place of confinement by altering the direction of its head. Many ~~reasons~~ have been ~~given~~ for the commencement of childbirth. One of them certainly is the efforts of the child to open a passage for itself into the air. Perhaps the throes of the mother are produced only by the irritation of the head of the child upon the mouth of the womb. These throes are connected with such extreme pain as sometimes to induce hypno-
& death. ~~Accordinging to the physician~~
~~with whom I talked~~ a certain degree of pain is supposed to be necessary

1786.62.12

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connected with childbearing. It is
true - it was the curse pronounced
upon the first female progenitor of the
human race, after she had disobeyed
her Mother, but it is equally true,
that man was condemned, ^{for the same offence} to earn his
bread with the sweat of his brow, and
yet many thousands of the human
race from the efforts of human ingenuity,
or from the natural fertility of some
countries, live without labor, and of
course escape the curse pronounced upon
our male progenitor. I do not think
there is an unchangeable & necessary
connection between pain & childbearing.
In some countries in Africa & ^{& South America,} the

✓ The Irish women take sweet oil
for some months before delivery to lessen
the pains of childbearing. It can act only
as a ~~as~~ by inducing sterility as an emmenagogue.
a Len discharges her egg with signs of pleasure.

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travellers tell us that women bring forth children without pain. Budde says that ~~they go off~~ the women in Sicily suffer scarcely any pain in childbearing, and a man and wife of extensive experience from St. Kitts informed me that the women in the West Indies bring forth children with much less pain than is felt by the women of more northern countries.

I have frequently observed the pains of childbearing to be ~~much~~ ^{much mitigated} by bloodletting a few days before delivery, & I have uniformly found delicate & sickly women to have the easiest labors. — Do not these facts

These gentlemen were my opinions
thus cautiously delivered ^{in the year 1795.} ~~on the 20th of October~~
~~1795.~~ But I no longer ~~do~~ deliver them
as conjectures. From my own observation,
and from the experience of many prac-
-titioners of midwifry, I am now satisfied
that the pains of parturition are as
much a disease as a plurisy or colic,
& that ^{they are} to be relieved by the same
remedies to remove this disease. The pain from
all this other causes. I shall mention
those Remedies hereafter. In the mean
while you may see the facts I have
collected, & my reasonings upon this
subject in ^{a number of} the Medical Repository pub-
-lished in Aug^r 1801. ~~trans~~ over to D
+ Bloodletting ¹²⁷⁹³
~~for~~ ~~as~~ ~~the~~ acts by inducing ~~direct~~ ~~removal~~
the ~~ability~~ of ~~obstruction~~ ~~the~~ ~~system~~, so to favour

suggest to us that it is as possible
by the efforts of human genius to
alleviate the ~~burden~~ ^{pains} of childbearing
in women, as it has been for human
industry to obviate ~~this~~ ^{V²} by agriculture
the curse inflicted upon the earth.

~~= Bloodletting.~~ ~~Its~~ ^{modest} efficacy has
been introduced into this city & its
use established not only
by Dr. D'Urville, ~~of~~ ^{but} by Dr. D'Urville
itself, ~~but~~ ^{and} it is now
known in this country, ~~that~~ ^{what} it will
do to the bones of ~~men~~ ^{men} ~~and~~ ^{and} by Dr. Hamilton
of Edinburgh is it prescribed even the midwives in
Genoa. ~~in Italy~~ It is called for more than [says Dr.
Bray of Leghorn from whom I rec^d the information]
from the peculiar dryness of the air, & the inflammatory
type of all the diseases of that city. The
discovery of this remedy to use the woods of
the Dr. Chippens "marks an era in the
history of midwifery".

paroxysm, but the same effects have been produced by large doses of Opium, - by the

convulsions of epilepsy, & lastly by a fit of Drunkenness. all these act by inducing such a degree of ^{Dyspnoea} ~~as indicated debility~~ as to suspend sensibility, ~~without~~ but without impairing ^{the} irritability, or the power of motions in ~~the~~ ^{the} fibres those parts of the body which exclude the fatigued. Per.

pair altogether, and thereby reveal the curse inflicted upon women after her fall from innocence in the garden of Eden. One important

of opium would be as would kill
 the system into a paroxysm of universal
 indirect debility. ^{But whether} ~~it is~~ ^{or} ~~not~~ ^{it is} ~~so~~ ^{it is}
~~that opium in large doses~~ ^{is} ~~so~~ ^{it is} ~~so~~ ^{it is}
~~or not in obviating~~ ^{still} ~~it is~~ ^{so} ~~so~~ ^{it is}
 the pain of childbearing, ~~but~~ ^{but} I have no
 doubt, but the time ~~when~~ will come
 when this pain will be as certainly,
 & as universally prevented as minimized
 as a fit of the colic. — ~~at an~~ ¹⁷⁹³

The next article in our syllabus
 is the different stages of life. I have spoken
 of one of them viz: of Infancy. Each of
 the others will come in more properly
 when I come to treat of the diseases
 of the different stages of life. —

~~Opium is a valuable & safe~~

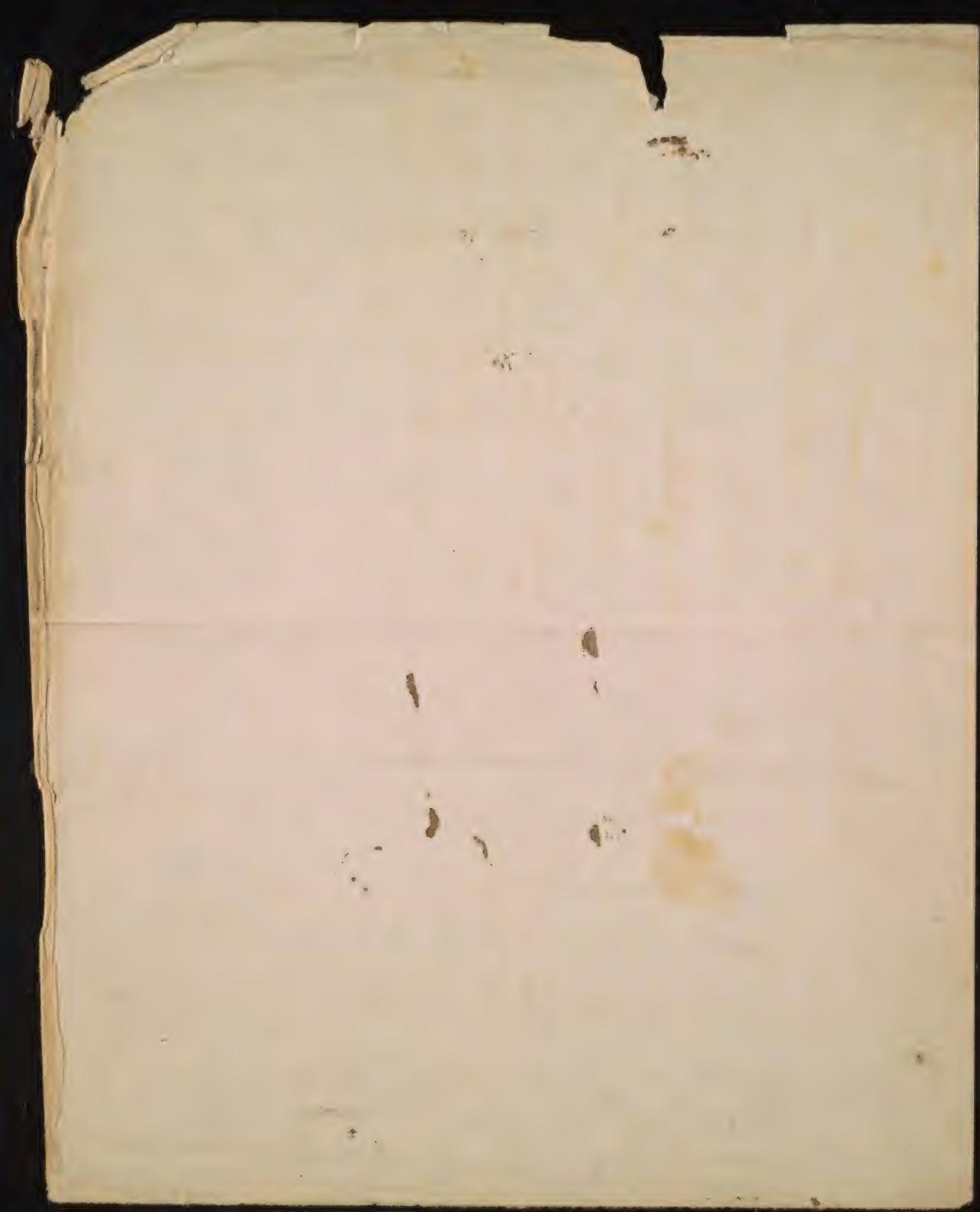
It would be an act of ingratitude to dismiss
the subject of Generation without acknowledging
our obligations to ~~Disseminate the illustrations~~ Dr
Haller for the light he has shed upon it
by his numerous experiments & observations.
To this illustrious physician we are indebted
for dissipating a great portion of the darkness
in which the indolence & ignorance of ages, aided
by the errors of Galen & Aristotle had involved
this subject. The words of a contemporary poet
~~introduced at the moment by a physician~~ ^{as} physician
shall supply the place of an eulogium upon
him upon this occasion.

"Live modern Wunder!" & be read alone.

"Thy Brain hath issue, tho' thy loins have none.

"Let Fruit Sprucian, be the Vulgar's care,

"Great Generations Self, is now thy heir.



~~fact upon this subject. A lady from Hall
who had been subject to Epileptic fits,
was delivered in one of them. Upon
her recovery from her fit, she declared
she had felt no pain, and was much
astonished. to see a child ^{that has been} taken from
her lying by her side.~~ —

O. There is but one question connected with
the history of the fetus in utero that I shall
take notice of in this place. & that is the
origin of marks upon children. They have
been ascribed to the imagination - but this
is unphilosophical. mention Dr Hunter & Dr
McLanor's fact. The system more plethora in
pregnancy than at any other time - & such
effusions as favor marks ^{are} more apt to
take place than than in any other state
of the system. ^{if these are communicated to the} fetus.

The analysis of the ~~solids &~~ fluids of the body has been ~~given~~ ^{given & treated off} already in speaking of the blood, & of the secretions & excretions. It will be improper to speak of the artificial analysis of the fluids or solids, until we have first traced the effects of disease & death upon them in our pathology.

We have thus agreeably to our syllabus taken a view of the functions of the human body - and of the functions & operations of the human mind. In the easy and pleasant action of ^{of the body} ~~the~~ ^{these functions and} functions of the mind, consists that inestimable blessing we call Health. ~~Felicity~~ or in other words, in Health is that state of the

¶ Before we take leave of the human body in its healthy state, it will be necessary to take notice of two opinions that have prevailed in with respect to the means of preserving health and it for this state for ever, or for a number of years far beyond ~~to~~ the present duration of human life. The possibility of producing perpetual existence in our world ~~by~~ has been held by some writers. Dr Price once thought it possible ~~that~~ ^{Certain improvements in} ~~Physical science~~ ^{said} philosophy were to be the means of producing this earthly immortality. And not spent a moment in exposing the error of this opinion.

~~For~~ ~~and~~ ~~so~~ "Dust thou art and unto dust, shall thou return" is ~~so~~ ^{the} universal & ~~perpetual~~ ^{from} ~~keeping~~ law to which there can be no ~~exception~~ ^{no} ~~peculiar~~ ^{peculiar} ~~injury~~ ^{injury} inflicted upon man from which there can be ^{no} ~~rescue~~. Death is the natural ^{no} we live by force,

System in which the its excitement, & excitability, are in an exact ratio to each other, and both equally diffused thro' every part of the body & mind. This definition of health admits of a considerable latitude - It excludes Strength as an ingredient in health. - ^{obliviate} An citizen ^{action} who cannot bear the ~~heat~~ of the sun for a single hour upon his body, and a dogless peasant who can work a whole summer ~~in his field~~ exposed to its burning rays without inconvenience, may both be in equally good health, - for in both, the excitement & excitab^y of their systems are in an exact ratio to each other ~~for the present~~ ^{gent.} Here - then we ~~quit~~ ^{take} the human

death is our natural state. ~~But~~ ^A ~~Opinions~~ ^{are} ~~many~~
~~by some the physician~~ ^{such as were deluded by the}
~~physician~~ ^{such as were deluded by the} ~~physician~~
is that ~~he~~ ^{he} ~~thought~~ it possible to prolong life to
the antibiotic age, by certain medicines,
or modes of living. Paracelsus ~~was~~ was
the father of this opinion. ~~He invented~~
~~many medicines~~ The liquor called his
proprietary deserves its name from its
being supposed to possess a power to prolong
life. Many ^{remedies} ~~remedies~~ ^{are} ~~are~~ ^{abund} ~~abund~~ ~~been~~
been recommended for that purpose, such
as Dr. in the Spring of the year, & the
transfusion of the blood of young animals
into old ones, ~~and~~ they have both been
tried often, but without effect. The
~~latter was~~ former was practised, & is
still popular in Germany, - the other
was tried above a century ago, in

Province where it was laid aside in consequence of its producing insanity ~~but~~ ^{but} but used occasionally with more success than either of the two. Still I believe it is possible for man to understand that have been made, but without the effect of pain from it, attaining to a much greater age than is now common in the world. ~~prolonging~~ to the antediluvian age. The efforts of the ~~in~~ ⁱⁿ renewing ~~system to~~ ^{the} ~~teeth~~ ^{the} teeth, and the eyesight, ~~the occasional return of the menses in old women~~ ^a clearly prove the body to ~~possess~~ ^a secret or latent ~~ways~~ ^{ways} of exerting ~~it~~ ^{it}. This may be called forth, & the present state used ^{with so much} ~~and~~ ^{and} ~~economized~~ ^{economized} in a future and happier state of human affairs, ~~the~~ ^{and thereby} ~~to be practised~~ ^{to be practised} as to produce something like the antediluvian age. The means for this purpose will be physical. Revelation favours this opinion. One of the ~~the~~ ^{the} ~~prophets~~ ^{prophets} ~~scripture~~ ^{scripture} alludes to

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body and mind of man as exposed from
a thousand and remote & exciting causes to
pain, - disease, - deformity & death. To enum-
erate these causes, and to explain the
nature of those morbid & distressing pheno-
mena which are produced by ~~by~~ them is
the business of Pathology, and this ~~is the~~
~~will succeed to~~ ~~few remarks upon~~ ^{the} ~~is called~~
~~part of~~ ~~Hygiene~~ - or the means of preserving health.

~~go to p: 789~~ ⁷⁸⁹
~~— the same fate has awaited all the boasted~~
~~means of dividing ~~the~~ the depth. Time (says~~
~~a celebrated French writer (malibert) is as ~~as~~~~
eternal in performing the business of destruction,
as nature is in the business of ^{creation:} ~~destruction~~
nor can an anchor ever be cast into the river
of life so as to arrest for a moment our passage
down its overflowing stream. The common

it when he says ~~man shall plant vineyards~~,
~~and eat the fruit of them a man shall~~
~~die a boy at a 100 years old that is, till~~
~~his 100th year shall be compared with the~~
~~age to which man shall then attain the~~
~~same as 10th year now & compared with~~
~~the present duration of human life.~~
~~The means of producing this longevity~~
~~will be physical - rational & moral.~~
The changes in the casts by cultivation
will dry up all the present forms of
putrid exhalation, - while religion &
religion shall teach men to avoid all
the ~~unwholesome~~ & exciting
causes of disease from
heat, cold - errors in diet & dress, and the
unhealthy influence of the passions upon
the body and mind. return to 0/1/93.

duration of human life is from 70 to 100.

- But very few attain to the former of those periods. ¹ ~~all who are born~~ ~~die before they~~ under puberty, & according to some calculations before they attain to the 8th year of life. Altho' I do not believe in the efficacy of any of the means that have been proposed for rendering ^{physical} life immortal, yet I have no doubt of the efficacy of the possibility of not only preventing ~~the~~ premature death, but of rendering the old age the ^{principal} outlet of human life. The means for this purpose have been called ^{more} natural - they consist in ~~the~~ the regulation of Climate, Drin^{ks} - ^{Air} Dress - exercise - the faculties of the mind & the exertions in what manner as to prevent the course ^{progress} of Health.

[This ¹⁹⁷ part of the Institutes of Medicine has
much ~~has been~~ been written upon this subject,
but to little ~~pro~~ has been called Hygia. Much
has been written upon it in all ages & in
all countries, not only in ~~poetry~~ but the Poets
have added their labors to those of Philosophers
& Physicians upon this subject. From
a want of Attention to the relative circum-
stances which influence the influence of
air - air & upon the body & mind, there
~~has been~~ much error, and that of a
mischievous nature has been published
hitherto in the world. These relative cir-
-stances are 1 Climate, ~~very~~ ^{very} ~~over~~
2 Different degrees of civilization. Very
different kind of aliment, & very differently
prepared - also very different ~~parties~~

✓ 5 The assimilating power of man to
circumstances, so that offensive things
become not only unavailing, but
agreeable from repetition from one
of the laws of habit —

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different degrees of exercise - temperature
of air ~~decreases~~ ^{decreases} in all the grades of
society from that of the savage to the highest
degree of civilization. The same thing may
be said of ^{by} employment. A farmer - a
soldier & sailor require a different mode
of life from a ~~country~~ person who lives
in the enjoyment of the luxuries of a city
life. Persons of different ages & of the two
sexes, and lastly the variety of temperament
have been said to have ^{dispositions} on them
all require ~~in~~ a considerable latitude
in the use of the means for preserving
health. I shall confine the remarks I
am about to deliver to the citizens
of ~~the United~~ our own country. You
all know the nature of our climate

I cannot take leave of this part of
our course without ~~taking~~ calling
upon you to enquire the difficulty
I found in answering a question pro-
posed to me by many of you that
was what book you should read
upon Physiology. You will now
perceive that the system I have taught
is not to be found in Brodoo's & the differ-
in all its form all the systems that
ever have been published. It is animal
The Doctrine of Animal ^{life} which I have
delivered, ~~in~~ has animated nearly every
function which I have described. &c
The new Brodoo's explanations I have
given of the ~~theory~~ of the operations

and the degrees of civilization & the em-
ployments of our citizens. When they
differ in age, it will be easy to apply ~~the~~
our general principles to each of them.

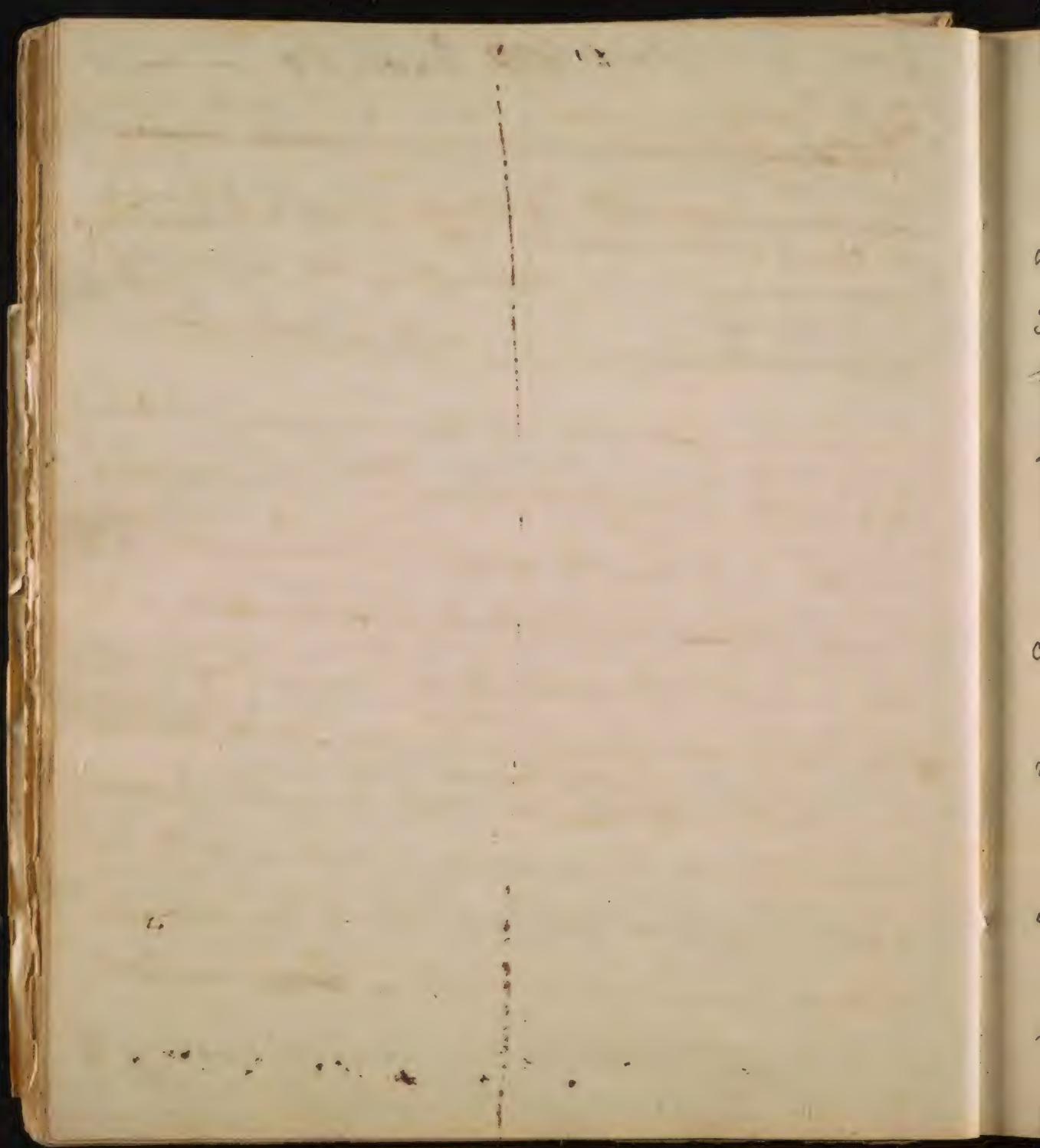
I shall begin with a garment, &
^{& drink} a drink, then
mention communicate its kinds, the best
modes of preparing them & the proportions
& manner of using them. ~~go to N 15~~
p 585 X

Having thus treated of the garments &
drinks as far as they contribute to health
& longevity, I ~~shall~~ now proceed to make a few remarks
upon the other ~~other~~ circumstances ^{which} are
connected with the same objects, but they
~~2 of 2~~ are of the relative effects of air
upon the body, I shall speak ~~of~~ on our
being in our houses &c

of the mind & of the human offices of
the Spleen, Liver, & Lymphatics, ^{Opium} also of their sympathies
of the different Systems with each other, —
added still further to the diversity of
^{System of Physiology} my ~~opinions~~ ^{opinions} from those which are
to be found in books, & that are taught
in other Universities. I do not say my
opinions upon these functions of these parts
they are true — but I will say I
believe them ^{to be true} & that ^{they} have completely
my principles of practice in pathology
— Therapeutics & the practice of medicine.
— As several of the Gent: who compose
this class did not hear my lectures upon
animal life, I shall deliver a summary
of them in a few words —

from some place 800 books &c - next
year 1800 as they
~~Pathology~~ will all come in ^{under} ~~with~~
the ~~over~~ ^{Pathology} ~~Pathology~~; I shall defer treating
of the effects of air upon the body
~~so soon~~ ^{till} come to that part of
~~over~~ ^{Pathology} ~~course~~. go to p 793 ②

3 Dress. All that is necessary under
this head may be summed up in a few
words. 1 Rather to exceed in warmth. 2 To
change it ~~in~~ not with the season - but with
the weather should it be every day, or
two or three times ^{same} in the day. Few ^{by the dresses} comes
are most affected ⁱⁿ our climate by not
attending to this practice, particularly in
not guarding against ^{old} cold in the evenings
of our autumnal months. ~~now~~ for cold
in all countries is the greatest enemy of



the health & life of man. The same remark applies to the clothes, as to dress. They should be accommodated to the changes in the weather.

3 Clothes when wetted should never be suffered to dry upon the body. Few constitutions are strong enough to resist disease from this cause.

4 The feet should be protected with double care from the cold. Leather is a conductor of heat, for which reason, shoes ~~are~~ and boots should be covered with woollen in very cold weather, & cork soals should protect the feet from ~~wet~~ the effects of wet weather.

5 Woollen cloathing has been found to be most healthy when worn next to the skin. Linnen & cotton may be worn above it. The cause of what

✓ In Great Britain there is a law com-
pelling ^{the friends of} every person who dies ^{to} be buried
there in flannel. It would be much
wiser to compel the living to wear see-
flannel, and to bury their dead in linen.

is ~~now~~ practised in our country. ^v Being
of on the British Act of Parliament for
burying in flannel. Less Tropical
diseases have greatly diminished in the
West Indies, since the general use of flannel
next to the skin in dress - for in no part
of the world is it of more consequence to
guard against cold than in hot countries.
I surely say it is the existing cause of nearly
all tropical diseases. —

The Cold Bath was formerly in general
use as a preservative of health. It is too violent
for civilized constitutions. The Warm
Bath is much better. It washes off cold
from the skin, & thus prevents cutaneous
visceral & even fevers. It moreover fortifies
the body against the effects of heat.



Labor or a substitute for it in exercise
 are necessary to health. The following ^{things} ~~remarks~~
 should be attended to in the use of both. 1 It
 should never be excessive, and should be dis-
 -ticed from as soon as ~~done~~ before it induces fatigue.
 2 It should never be ^{unduly} ~~done~~ before breakfast,
 or before taking aliment of some kind in
 the morning - nor soon after a full
 meal - nor after eight.
 3 It should be performed in the open air,
~~its confined situation~~ "Vitam sub diis agat"
 said the poet. Longest lived tradesmen
 in Philadelphia are carpenters who work in the
 open air. Respiration is increased by
 labor & this in a close room becomes
 a source of breathlessness or disease. -
 Every part of the body should be exercised,

5 ~~hands~~ long shore men & sailors suffer least from labor when they perform it with their shirts off & it ^{in hot weather} favors the escape of perspiration sweat and thus cools the body.

The kinds of exercise most commonly resorted to for the preservation of health are walking and riding either in a carriage or horseback. The latter should be preferred. To enjoy the benefit of this exercise constantly it will be necessary to attend to the health of the noble animal to which whose strength & gentleness we are indebted for it. For this purpose I shall deliver a few directions for the management of a horse that is used for pleasure or business.

— These directions will I hope be useful. They will serve to illustrate some of our physiological principles; — they will enable

especially the arms ⁸⁰⁴ which have a great influence on the Breast. ✓

The ^{natural} functions of the mind require exercise to keep them in health. They impart health likewise to the body. Hence it has been said students never have been often too long lived than other people under equal circumstances. Study to be healthy should in the plan be alternated with labor ~~and~~ exercise.
~~It should be~~ and society. 2 The objects of it should be occasionally varied. 3 It should be ~~as~~ the morning hours are most favourable to it. 4 It should be avoided when practicable after a full meal, and after 10 o'clock night. Gibbys's practice ^{at night} the system becomes paralysed after night, & is overstimulated by study.

✓ to this head belongs the government
of the passions. Health & long life depend
greatly upon their being constantly under
the influence of reason & Religion.

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lest if necessity imposes study after night, let it never be in a small & close room. The air from Candles & lamps is rendered unhealthy, and seldom fails of inducing disease. V

whose employments gave them the
best opportunities of acquiring this
kind of knowledge. -

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Sleep

✓ Should be on matras in summer & feather bed in winter. Large beds best in both seasons - ^{coolest} warmest in summer & warmest in winter. Scatter or cide down coverings to be prefer'd to Blankets in winter. Dafford ^{more} ~~most~~ warmest ^{the} wth weight & and they are particularly useful to invalids, especially to consumptive patients.

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swell in sleep, and thus give pain, or create
obstructions. ~~The feet should be placed in a~~
The feet should be placed horizontally when
sleep is taken in a sitting posture, or they
will soon become anaemic. After the
cause of Drowsiness in old people. ~~It is~~ It is
~~unhealthy to sleep soon after a~~
heavy supper. Two or three hours at least
should pass away before bedtime. See the
effects of the contrary practice in children in
and: Dr. J. vol. 4: th ~~✓~~ I cannot dismiss
the subject of Sleep, without taking notice of
an opinion held by the late Dr. Cordonet
upon the subject. He supposed it to be disease,
and in that philosophy would one day
~~teach us~~ ~~us~~ cure it, and enable
us to live without it. This is ~~far~~

understanding
✓ the immoral faults to its ^{elevated &} those ["] this,
preminent seat in the mind, and thus
prevents disease and vice. But for how
long we ^{will} be the most miserable beings
in the world?" says faint.

807

from being true, that Sleep is a remedy
for the predisposition to disease. It equal-
~~cially removes debility & crystallizes ex-~~
~~- citement, and thus prevents disease by~~
~~destroying dangerous apertures of ideas - colors &~~
~~distractions, & that sleep were~~
much better protection than cordw^t
upon this subject. — " ~~He it Harrison~~
~~condemned~~ The former after enumerating
its benefits to the body & mind ~~encouraging~~
pronounces a blessing upon the man that
first invented it." The words of the British
poet are still more to our purpose.

" Sleeps, that knits up, the ravell'd sleeve of
care.

" ~~This settles of~~ — sore labour's bath.

" Balm of lusty minds, great nature's second
course nourisher, in life's - feast. ^{return to 2793}

V 1 In spite of all the advantages we derive from regularity in diet - drinks - sleep - exercise - study &c - the remark of Celsius is ~~strictly~~ strictly true - that is - "to avoid scarce habits of any kind": In our intercourse with the world in the ordinary ~~to~~ business of life, we are often obliged to depart from the regularity & order of our own ~~five~~ sides. ~~when~~ Now when we do - we run the risk of contracting a disease. Hence it will be useful now and then to break through a good habit - to prevent our suffering from the unavoidable ^{unavoidable} grasp of it in ~~case~~ travelling or in company. I have known men to suffer very much from eating a ~~supper~~ dinner,

I shall conclude this ~~paper~~ ^{conclude this} on this subject by
a few ~~more~~ remarks, each of ^{which} ~~which~~ have been the
result of my own observations. V

2 Longevity is to ~~in~~ I have observed longevity to
be hereditary, in as long lived ancestors have
long lived children often (estens paribus)
than persons who do not attain to a great
age.

3 I have observed that health & longevity
are very much connected w: temperance
in every thing or upon a due regard to
diet - dress &c in early life. ^{It is in} The ~~old~~ ^{old} ~~upper~~
middle life we usually expire by sickness
& or death, the follies & sins of our youth.
The Spanish proverb is a truly wise.

from drinking tea, from ~~driving~~^{or} sitting up an hour or two later than usual, that would not ^{have} been in the least inconvenienced by any of them had they ever ^{conformed to} ~~indeed adopted~~ into those acts in their own family. — However much Invalids ~~often~~ require strictness in their habits — even in good health ~~often~~ becomes offensive by them, and when they are compelled by accident or necessity to depart from them — often contract thereby lasting diseases. —

It is to forbid, occasional ~~for~~ ^{Moderate} indulgence at the festive board. The late D^r Clyburn belonged to a Club in Dublin that met every fortnight at which he always drank a glass ^{or two} of wine extraordinary. The day afterwards he enjoyed

"If we wish to be young when you are old, be old [that is - ~~more~~ prudent, - wise & frugal of your health] when you are young." Economy ^{in youth} in the expenditure of strength, has the same influence upon health in rendering old age comfortable, that Economy in the expenditure of money, has in early life in rendering old age wealthy, & independent. This remark is not intended ^V

48 I have never known an instance of old age where persons have been much afflicted with stomach complaints: the remark is connected with the foregoing, for intemperance in eating whe-
ther

annual health & spirits - drawn forth ^{from} by the latent ~~for~~ resources of his Constitution. A fit of sickness often has the same effect in bringing forth latent strength, often prolonging life. I have seen old age protracted by it ^{for} many years, for few men die of exhausted strength -

5. ~~to the body what the Conscience is~~
~~the mind. No man ever did violence~~
~~to it for ever for any length of time~~
~~with impunity. It is the Conscience of~~
~~the body, and its dictates should therefore~~
~~be listened to & obeyed with as much~~
~~attention & obsequiousness, as we are~~
~~tought to obey the dictates of Conscience~~
~~in preserving the moral~~
~~health & happiness of our minds.~~

Retum to 0793 -

its relate to quantity, or improper food
or drinks - also ^{to} ~~study~~ ^{papers of the mind} Be all ^{as} friends
only upon the stomach. If you wish therefore
to enjoy health & long life, ~~is to~~ ^{is} to avoid
offending your ~~stomach~~ ^{hosting} this regulator
out of order.

of the animal machine, & in amil with
your family - quarrel with your neighbours - nay with
the whole world, ~~but~~ ^{rather} ~~lose~~ ^{this}
quarrel
than with your stomachs. - ~~they are~~
Return to 0793.

1810. finished Phisology Decr. 2. 3.^o

